

MOSES OF UNUSUAL INTEREST FROM BAJA CALIFORNIA

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The arid lands of Baja California support, naturally, a limited moss flora. The few collections that have been made there include, however, a fair number of species of interest which indicate floristic ties with California and Arizona rather than an expected relationship with Mexico's Sierra Madre Occidental or central plateau. Insofar as it is known, the bryoflora has been completely documented by Koch and Crum (1950), Crum and Miller (1957), and Crum and Steere (1959).

The present report, listing nine mosses new to Baja California, three of them new to Mexico, is based on a few incidental collections made by Reid Moran in 1958, 1961, and 1968 and C. F. Harbison in 1957. A complete set of specimens is deposited at SD. Some duplicates are represented in MICH.

Following is a list of localities, giving some details not repeated in the citation of individual specimens:

Guadalupe Island: Rocky arroyo wall, Arroyo Mepomene, ca. 400 m. alt., $28^{\circ} 55\frac{1}{2}'$ N, $118^{\circ} 15'$ W, *Reid Moran*, 29 April 1958.

Gaudalupe Island: North slope at north end of island, ca. 1000 m. alt., $29^{\circ} 09\frac{1}{2}'$ N, $118^{\circ} 19'$ W, *C. F. Harbison*, 14 December 1957.

Sierra San Borja: Decomposed granite, east slope of mountains above El Terminal, 1100 m. alt., 28° N, $113^{\circ} 36'$ W, *Reid Moran*, 25 Nov. 1961.

San Pedro Mártir: East slope of Cerro "2828," on east rim, 2800 m. alt., $31^{\circ} 02'$ N, $115^{\circ} 27'$ W, *Reid Moran*, 24 August 1968.

Ceratodon stenocarpus BSG. North end of Guadalupe Island, *Harbison*, Dec. 14, 1957. Cerro 2828, Sierra San Pedro Mártir, *Moran 15414* in part.—A genus new to Baja California. Both specimens are sterile and, therefore, the specific designation may be in some question. Both *C. stenocarpus* and *C. purpureus* (Hedw.) Brid. occur in Mexico and in the southwestern United States, but *C. stenocarpus* is by far the more common. It ranges from the American Southwest to Bolivia and is common in similar latitudes in the Old World.

Encalypta vulgaris Hedw. Cerro 2828, Sierra San Pedro Mártir, *Moran 15414* in part.—A calciphile widespread in western North America but not previously known from Mexico. It is widely distributed in Europe, Asia, Australia, Tasmania, New Zealand, and New Guinea.

Bryoerythrophyllum recurvirostrum (Hedw.) Chen. Cerro 2828, Sierra San Pedro Mártir, *Moran 15413* in part, *15414* in part.—A very wide-ranging calciphile, occurring in Europe, Asia, and Africa, and also across northern North America and south to Mexico, Arkansas, Ohio, and New York.

Tortula bartramii Steere. On decomposed granite, above El Terminal,

Sierra San Borja, *Moran 8506* in part.—A rare species already known from Sonora and Chihuahua, as well as the southwestern United States.

Tortula mucronifolia Schwaegr. Rocky wall of Arroyo Mepomene, Guadalupe Island, *Moran 6731*.—A circumpolar calciphile, widespread from Alaska to Greenland and south to northern Mexico in the West, Nebraska, the Great Lakes, and Nova Scotia in the East.

Grimmia apocarpa Hedw. Cerro 2828, Sierra San Pedro Mártir, *Moran 15414* in part.—Nearly cosmopolitan but limited to upland or montane areas with outcropping rock.

Pohlia elongata Hedw. Cerro 2828, Sierra San Pedro Mártir, *Moran 15414* in part.—A montane species of wide, circumboreal distribution but rare and local. British Columbia to Arizona and New Brunswick to Minnesota and south to Georgia. These plants are autoicous and could therefore be referred to *P. acuminata* Hornsch. (which is permitted both paroicous and autoicous inflorescences), but I do not feel that the supposed differences justify differentiation of two species.

Mnium arizonicum Amann. Cerro 2828, Sierra San Pedro Mártir, *Moran 15413* in part.—Only a few plants were found, scattered in mixture with several other mosses, but enough to demonstrate the distinctive shape, serration, and areolation of the leaves of this rare species which ranges from Wyoming and Utah south to New Mexico and Arizona. A first record for Mexico.

Hypnum revolution (Mitt.) Lindb. Cerro 2828, San Pedro Mártir, *Moran 15413, 15414*.—Circumpolar; a characteristic calciphile of northern and Rocky Mountain distribution, already known from Mexico, from Puebla and Tamaulipas.

LITERATURE CITED

- CRUM, H. and H. A. MILLER. 1957. Bryophytes from Guadalupe Island, Baja California. Southw. Naturalist 1:116-120. (1956).
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 KOCH, L. F. and H. CRUM. 1950. Mosses of Baja California. Rev. Bryol. Lichénol. 19: 188-192.

NOTES AND NEWS

NEW LOCALITY FOR LAVATERA VENOSA S. WATS. (MALVACEAE).—*Lavatera venosa* was described from the San Benito Islands, off the west coast of central Baja California, where it is common on all three islands. Brandegee (Zoe 5:25, 1900) reported it also from San Geronimo Island and from a rock at the mouth of San Bartolomé Bay. On tiny San Geronimo, a guano island mostly barren of plant life, only two plants of *L. venosa* were found in 1963; and the guano keeper, who knew every inch of the island, said there were no more (*Moran 10574*, SD).

In April 1971, I found a single plant of *L. venosa* on Isla Ascunción, about 53 miles southeast of San Bartolomé Bay. However, a small islet off the northeast shore was topped by a lush growth of what appeared through the binoculars to be the same plant, and the guard told me that it was the same.—R. MITCHEL BEAUCHAMP, Department of Botany, San Diego State College, San Diego, California 92115.